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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 02	STN pricing information for 2008 now available
NEWS 3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 5	JAN 28	MARPAT searching enhanced
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NEWS 15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS 16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
NEWS 17	MAR 31	LPCI now available as a replacement to LDPCI
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NEWS 20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS 21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS 22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS 23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS 24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS 25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS 26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS 27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS 28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS 29	JUN 25	CA/CAplus and USPAT databases updated with IPC reclassification data

NEWS 30 JUN 30 AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS 31 JUN 30 EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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=> FILE REG

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FULL ESTIMATED COST	0.21	0.21

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DICTIONARY FILE UPDATES: 4 JUL 2008 HIGHEST RN 1032821-09-2

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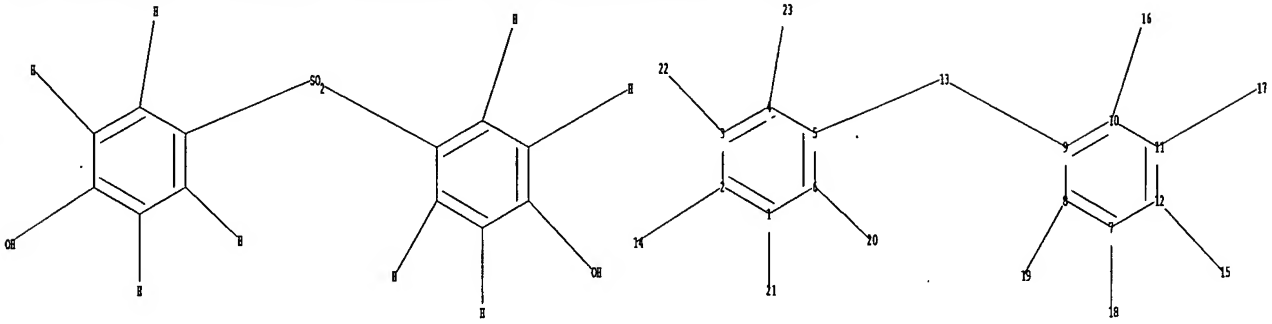
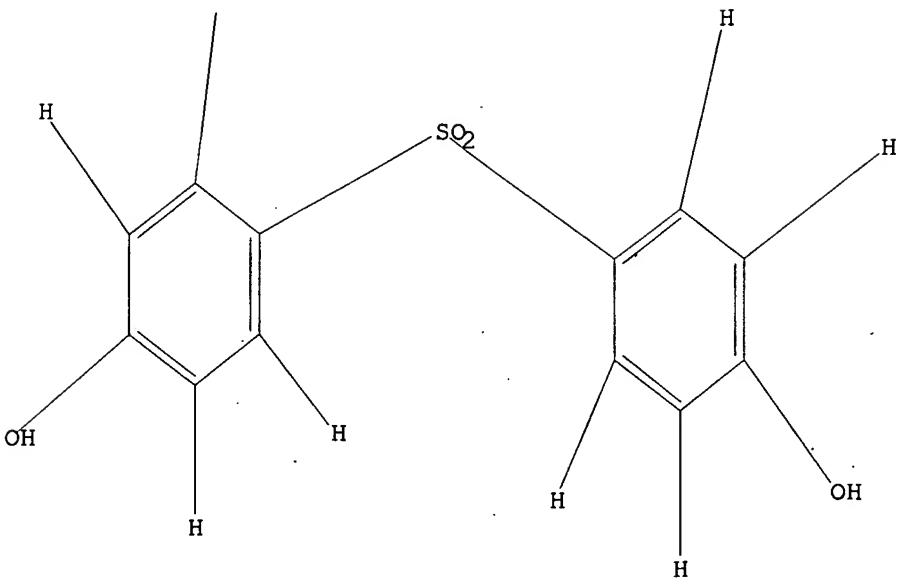


chain nodes :
13 14 15 16 17 18 19 20 21 22 23
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-21 2-14 3-22 4-23 5-13 6-20 7-18 8-19 9-13 10-16 11-17 12-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
2-14 12-15
exact bonds :
1-21 3-22 4-23 5-13 6-20 7-18 8-19 9-13 10-16 11-17
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> FILE CAPLUS

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FILE COVERS 1907 - 6 Jul 2008 VOL 149 ISS 2
FILE LAST UPDATED: 4 Jul 2008 (20080704/ED)

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=> FILE REG
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.48       1.61

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STRUCTURE FILE UPDATES:    4 JUL 2008  HIGHEST RN 1032821-09-2
DICTIONARY FILE UPDATES:   4 JUL 2008  HIGHEST RN 1032821-09-2

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  conducting SmartSELECT searches.

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predicted properties as well as tags indicating availability of
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on property searching in REGISTRY, refer to:

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=> S L1
SAMPLE SEARCH INITIATED 17:15:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1393 TO ITERATE

100.0% PROCESSED     1393 ITERATIONS                          50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        25621 TO    30099
PROJECTED ANSWERS:            1231 TO     2369

L2            50 SEA SSS SAM L1

=> S L1 FULL
FULL SEARCH INITIATED 17:15:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    28068 TO ITERATE

100.0% PROCESSED    28068 ITERATIONS                        1690 ANSWERS
SEARCH TIME: 00.00.01

L3          1690 SEA SSS FUL L1

=> FILE CAPLUS
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
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FULL ESTIMATED COST 178.36 179.97

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FILE COVERS 1907 - 6 Jul 2008 VOL 149 ISS 2
FILE LAST UPDATED: 4 Jul 2008 (20080704/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> S L3
L4 3963 L3

=> S L4 AND PHENOL
262582 PHENOL
L5 865 L4 AND PHENOL

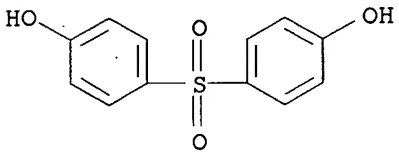
=> S L5 AND DEHYDRATION
105265 DEHYDRATION
L6 20 L5 AND DEHYDRATION

=> D L6 IBIB ABS HITSTR 1-20

L6 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:310057 CAPLUS
DOCUMENT NUMBER: 140:321109
TITLE: Preparation of 4-alkoxy-4'-hydroxydiphenyl sulfones
INVENTOR(S): Oi, Satsuo; Yanase, Norio; Kitahara, Takayuki
PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004115393	A	20040415	JP 2002-278012	20020924

PRIORITY APPLN. INFO.: JP 2002-278012 20020924
OTHER SOURCE(S): CASREACT 140:321109; MARPAT 140:321109
AB Title compds. are prepared by dehydration of PhOH with sulfonating agents or phenolsulfonic acid in solvents and reaction of the liquid-containing 4,4'-dihydroxydiphenyl sulfone (I) with alkyl halides in the presence of alkalies. Wet cake of I was treated with iso-PrBr in H2O/o-dichlorobenzene in the presence of KOH and K2CO3 at 90-100° for 15 h to give 80% 4-isopropyloxy-4'-hydroxydiphenyl sulfone.
IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of alkoxyhydroxydiphenyl sulfones by alkylation of dihydroxydiphenyl sulfone)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:287831 CAPLUS
DOCUMENT NUMBER: 140:321107
TITLE: Process for preparation of high-purity 4,4'-dihydroxydiphenylsulfone
INVENTOR(S): Ogata, Eiji; Oi, Fumio; Yanase, Norio; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

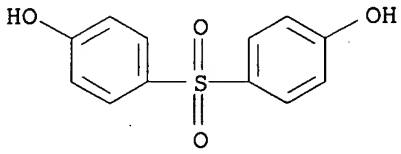
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029020	A1	20040408	WO 2003-JP12049	20030922
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003266552	A1	20040419	AU 2003-266552	20030922
CN 1684943	A	20051019	CN 2003-823044	20030922
US 20050272956	A1	20051208	US 2005-529074	20050324
PRIORITY APPLN. INFO.:			JP 2002-279199 A	20020925
			WO 2003-JP12049 W	20030922

OTHER SOURCE(S): CASREACT 140:321107

AB This invention pertains to a method for producing 4,4'-dihydroxydiphenylsulfone having an extremely high purity, which comprises subjecting phenol and either a sulfonating agent or phenylsulfonic acid to a dehydration reaction, and is characterized by conducting the dehydration reaction in the presence of a nonpolar aromatic solvent while suspending the dihydroxydiphenyl sulfones generated, mixing a polar solvent with the suspension resulting from the reaction to dissolve at least part of the dihydroxydiphenylsulfones, and then crystallizing 4,4'-dihydroxydiphenylsulfone.
For example, phenol was treated with 98% H2SO4 in mesitylene to give 4,4'-dihydroxydiphenylsulfone (83%) with 99.5% purity.

IT 80-09-1P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of high-purity dihydroxydiphenylsulfones)

RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



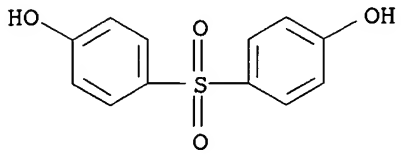
L6 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:823343 CAPLUS
DOCUMENT NUMBER: 139:330367
TITLE: Process for manufacturing 2,4'-dihydroxydiphenylsulfone
INVENTOR(S): Yoshino, Takeshi; Tomoda, Yuichi; Taniguchi, Norihiro; Igarashi, Kazuaki; Hasegawa, Takeo
PATENT ASSIGNEE(S): Nikka Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003300951	A	20031021	JP 2002-102541	20020404

PRIORITY APPLN. INFO.: JP 2002-102541 20020404

AB The title process comprises (a) separating 4,4'-dihydroxydiphenylsulfone (I) by crystallization from a mixture of I, 2,4'-dihydroxydiphenylsulfone (II), phenylsulfonic acid, and phenol (obtained by reaction of phenol with sulfuric acid or phenolsulfonic acid) to give a mixture (in which the amount of II is larger than the amount of I), (b) removing phenol (e.g., by distillation) to decrease the concentration of phenol in the mixture to < 10 weight%, (c) adding water to the mixture and crystallizing II
and filtering the mixture to collect II. II is a developer for thermal recording material. The title process is simple and gives II in high yield.

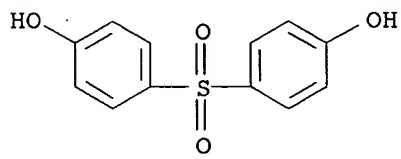
IT 80-09-1P, 4,4'-Dihydroxydiphenylsulfone
RL: BYP (Byproduct); REM (Removal or disposal); PREP (Preparation); PROC (Process)
(process for manufacturing pure 2,4'-dihydroxydiphenylsulfone)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:686019 CAPLUS
DOCUMENT NUMBER: 139:205092
TITLE: Process for manufacturing 2,4'-dihydroxydiphenyl sulfone
INVENTOR(S): Yoshino, Takeshi; Taniguchi, Norihiro; Igarashi, Kazuaki; Hasegawa, Takeo
PATENT ASSIGNEE(S): Nikka Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003246775	A	20030902	JP 2002-46802	20020222
JP 4011364	B2	20071121		
PRIORITY APPLN. INFO.:			JP 2002-46802	20020222

AB In the process for manufacturing 2,4'-dihydroxydiphenyl sulfone (I) by dehydration/condensation reaction of phenol with phenolsulfonic acid or phenol with sulfuric acid, fuming sulfuric acid or sulfuric anhydride, 4,4'-dihydroxydiphenyl sulfone is added to the starting material. I is a developer for thermal recording material. The title process gives I in high yield.
IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(process for manufacturing 2,4'-dihydroxydiphenyl sulfone)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:678778 CAPLUS
DOCUMENT NUMBER: 139:230468
TITLE: Process for preparation of dihydroxydiphenylsulfone isomeric mixtures
INVENTOR(S): Oi, Fumio; Yanase, Norio; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003070695	A1	20030828	WO 2003-JP1836	20030220
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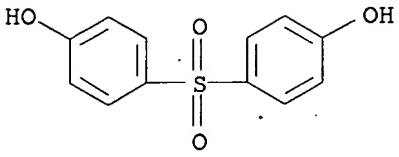
JP 2003313160	A	20031106	JP 2002-319967	20021101
AU 2003211551	A1	20030909	AU 2003-211551	20030220
PRIORITY APPLN. INFO.:			JP 2002-46629 A	20020222
			JP 2002-319967 A	20021101
			WO 2003-JP1836 W	20030220

OTHER SOURCE(S): CASREACT 139:230468
AB This invention pertains to a method for producing high-quality dihydroxydiphenylsulfone isomeric mixts. which cause color development (color formation) in non-image areas when used in thermal recording paper as the developer. Specifically, a process for the production of dihydroxydiphenylsulfone isomeric mixts., characterized by subjecting a solution or suspension of a crude isomeric mixture comprising 2,4'-dihydroxydiphenylsulfone and 4,4'-dihydroxydiphenylsulfone in an organic solvent to cooling and filtration successively; a process for the production of dihydroxydiphenylsulfone isomeric mixts., characterized by mixing a solution or suspension of a crude isomeric mixture comprising 2,4'-dihydroxydiphenylsulfone and 4,4'-dihydroxydiphenylsulfone in an organic solvent with an aqueous basic solution to extract the isomeric mixture into the aqueous basic solution, removing the resulting organic solvent layer by liquid-liquid separation, adding an acid to the resulting aqueous basic solution to precipitate crystals, and recovering the crystals by filtration. For example, phenol was treated with concentrate H2SO4 in 1,2-dichlorobenzene to give a mixture of 2,4'-dihydroxydiphenylsulfone and 4,4'-dihydroxydiphenylsulfone (35/65).
IT 80-09-1P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of dihydroxydiphenylsulfone isomeric mixts. by sulfonation)
RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:656735 CAPLUS
DOCUMENT NUMBER: 139:199089
TITLE: Process for production of mixture of dihydroxydiphenyl sulfone isomers
INVENTOR(S): Oi, Fumio; Yanase, Norio; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068733	A1	20030821	WO 2003-JP1149	20030205
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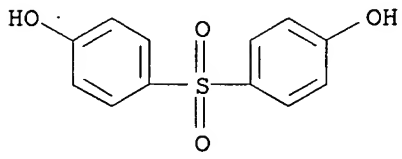
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003238523	A	20030827	JP 2002-38443	20020215
AU 2003207214	A1	20030904	AU 2003-207214	20030205

PRIORITY APPLN. INFO.:		
JP 2002-38443	A	20020215
WO 2003-JP1149	W	20030205

AB A process for production of a mixture of dihydroxydiphenyl sulfone isomers comprising reacting phenol with a sulfonating agent in an organic solvent is characterized in that phenol is used in an amount of 2 to 4 mol per mol of the sulfonating agent, the organic solvent is used in an amount 0.5 to 6.5 times (by weight) the theor. yield of the mixture of the dihydroxydiphenyl sulfone isomers, and the products of the reaction are obtained as a mixture of isomers. The title compds. are useful as developers for thermal printing paper. The title process is industrially advantageous.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for production of mixture of dihydroxydiphenyl sulfone isomers by reacting phenol with sulfonating agent in organic solvent)

RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:512886 CAPLUS
DOCUMENT NUMBER: 140:200468
TITLE: Feedstock recycling of polyester resin wastes by decomposition with hydroxy carboxylic acid
AUTHOR(S): Kubota, Shizuo; Maeda, Takuya; Mori, Hajime
CORPORATE SOURCE: Industrial Technology Center of Wakayama Prefecture, Wakayama-city, 649-6261, Japan
SOURCE: Nippon Setchaku Gakkaishi (2003), 39(6), 240-247
CODEN: NSEGE7; ISSN: 0916-4812
PUBLISHER: Nippon Setchaku Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The chemical recycling of unsatd. polyester resin waste discharged in the button manufacturing, FRP waste discharged in the septic tank manufacturing and polyester resin waste of the PET bottle waste was examined A polyester resin waste was crushed, and it decomposed in the hydroxy carboxylic acid, and the dehydration was condensed as it is without refining the degradation product, it was synthesized in the unsatd. polyester. P-Hydroxycinnamic acid was made to react with the degradation product in the decomposition in the saturated hydroxy carboxylic acid, and the unsatd. polyester was got. Decomposition and synthesis were done in the reaction of same vessel in unsatd. hydroxy carboxylic acids such as the propylene glycol - maleic anhydride adduct, and the unsatd. polyester was got. A PET bottle waste was resolved in propylene glycol - maleic anhydride adduct (Mn = 418, Mw = 511) at 240°C, for 1 h, and degradation product (Mn = 928, Mw = 1,622) was got. then, by condensing for 2 h, at 210°C, unsatd. polyester (Mn = 3,148, Mw = 8,797) was got.

IT 80396-45-8P, Bisphenol S-ethylene glycol-terephthalic acid copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(feedstock recycling of PET resin wastes by decomposition with hydroxy carboxylic acid)
RN 80396-45-8 CAPLUS
CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and 4,4'-sulfonylbis[phenol] (9CI) (CA INDEX NAME)

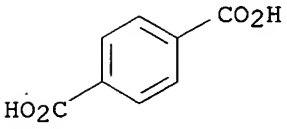
CM 1

CRN 107-21-1
CMF C2 H6 O2

HO—CH_2—CH_2—OH

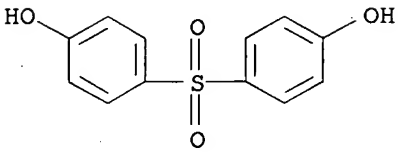
CM 2

CRN 100-21-0
CMF C8 H6 O4

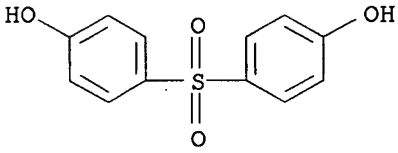


CM 3

CRN 80-09-1
CMF C12 H10 O4 S



IT 80-09-1, Bisphenol S
RL: RCT (Reactant); RACT (Reactant or reagent)
(feedstock recycling of PET resin wastes by decomposition with hydroxy carboxylic acid)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)

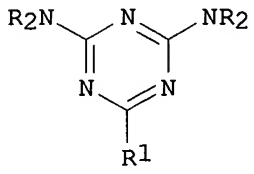


L6 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:200549 CAPLUS
DOCUMENT NUMBER: 138:222349
TITLE: Nitrogen-containing fire-resistant epoxy resins with good fire and heat resistance and compositions therewith
INVENTOR(S): Huang, Kun-Yuan; Chen, Hung-Hsing; Chen, Chih-Fu; Chao, Huan-Chang
PATENT ASSIGNEE(S): Changchun Synthetic Resin Co., Ltd., Taiwan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003073448	A	20030312	JP 2002-29338	20020206
JP 3588456	B2	20041110		
TW 513482	B	20021211	TW 2001-90121704	20010831
US 20030099839	A1	20030529	US 2002-35238	20020104
US 6617029	B2	20030909		

PRIORITY APPLN. INFO.: TW 2001-90121704 A 20010831
GI

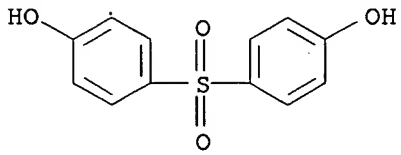


I

AB Title epoxy resins are represented by the formula I, where R = independently H or R2-C6-13 aryl-(OR3)r, R2 = C1-6 alkylene, R3 = epoxypropane, r = 1 or 2, at least one R ≠ H, and R1 = Ph or N(R)2. Thus, 126 g melamine and 240 g 37% formaldehyde aqueous solution were reacted in methanol at 60°, 282 g phenol and 1.3 g HCl were added and reacted at 80° to give 409 g OH and Ph group-containing triazine with N content 20.5%, 100 g of which was reacted with epichlorohydrin at 70° under 200 mmHg pressure in the presence of NaOH to give 138 g fire-resistant epoxy resin with N content 14.9% and epoxy equivalent 205 g/equivalent A composition comprising CNE 200ELB 10.34, the resulting fire-resistant epoxy resin 6.00, PF 5110 7.80, triphenylphosphine 0.26, silane coupling agent 0.60, fused silica 74.00, carbon black 0.40, and carnauba wax 0.60 parts showed spiral flow (EMMI-1-66) 75 cm, flame retardance (UL 94) V-0, moisture absorption (100° for 24 h) 0.28%, and good solder heat resistance.

IT 80-09-1, Bisphenol S
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of nitrogen-containing fire-resistant epoxy resins with good fire and heat resistance and their use as fire retardants in compns.)

RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)

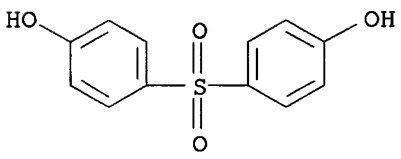


L6 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:122416 CAPLUS
DOCUMENT NUMBER: 135:108875
TITLE: Synthesis of 4,4'-dihydroxydiphenyl sulfone
AUTHOR(S): Huang, Wen; Tang, An-bing; Shi, Bi; Cao, Ming-rong
CORPORATE SOURCE: Leather Chemistry and Engineering Key Laboratory of Education Department, Sichuan University, Chengdu, 610065, Peop. Rep. China
SOURCE: Jingxi Huagong (2001), 18(1), 43-45
CODEN: JIHUFJ; ISSN: 1003-5214
PUBLISHER: Jingxi Huagong Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB A new method for synthesizing 4,4'-dihydroxydiphenyl sulfone (I) from PhOH and H2SO4 was studied, in which stepwise vacuum dehydration was adopted with supplementary addition of PhOH. The quantity of PhOH added during the reaction was the key factor influencing the rate of production Under optimal conditions the sulfonation of PhOH was carried out by reacting PhOH and H2SO4 (mole ratio 1.000:1.175) at 100° for 3 h. The temperature was raised to 150° and the reaction was continued for 4 h during which time H2O was removed at 0.03-0.04 MPa for 15 min after each hour of reaction (3 times). PhOH (112.5% based on original quantity) was divided equally into 3 portions and added sep. to the reaction mixture after each dehydration phase. The yield of I reached 82%.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



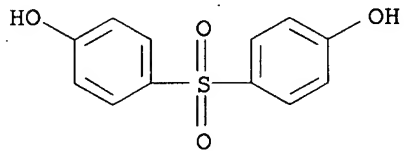
L6 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:71587 CAPLUS
DOCUMENT NUMBER: 128:140519
ORIGINAL REFERENCE NO.: 128:27639a,27642a
TITLE: Preparation of dihydroxydiphenyl sulfones as developers for thermal printing paper
INVENTOR(S): Ogata, Eiji; Yanase, Tsuneo; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10025277	A	19980127	JP 1996-183108	19960712
JP 3890387	B2	20070307		
PRIORITY APPLN. INFO.:			JP 1996-183108	19960712

AB Dihydroxydiphenyl sulfones (I), useful as developers for thermal printing paper (no data), are prepared by dehydration of 1 mol equiv of sulfonating agents with 2.0-4.0 mol equiv of PhOH in 2.0-6.5 times weight of o-C6H4Cl2 (to theor. yield of I), as reaction mixture contain 2-20 weight% unreacted PhOH (to an amount of unreacted PhOH and o-C6H4Cl2) and 2.0-7.0 times weight amount of unreacted PhOH and o-C6H4Cl2 (to theor. yield of I) after reaction end, crystallization of 4,4'-dihydroxydiphenyl sulfone from the reaction mixts. at 80-160°, and isolation of 2,4'-dihydroxydiphenyl sulfone from a filtrate. PhOH was treated with H2SO4 in o-C6H4Cl2 (3.9 times weight to theor. yield of I) at 150-180° for 5 h to give a reaction mixture containing 4.8 weight% unreacted PhOH (to an amount of o-C6H4Cl2 and unreacted PhOH) and 4.1 times weight amount of unreacted PhOH and o-C6H4Cl2 (to theor. yield of I). The reaction mixture was cooled. at 120° to give 42.4% wet cake of 4,4'-I, while filtrate was cooled at 25° to give 46.9% wet cake of 2,4'-I.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(preparation of dihydroxydiphenyl sulfones by dehydration of phenol with sulfonating agents and crystallization)

RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:482709 CAPLUS
DOCUMENT NUMBER: 121:82709
ORIGINAL REFERENCE NO.: 121:14849a,14852a
TITLE: Preparation of 2,4'-dihydroxydiphenyl sulfone
INVENTOR(S): Hosoda, Masaaki; Kurose, Mikihiko; Sasada, Sachihiro; Saito, Hajime; Makino, Kimihiro
PATENT ASSIGNEE(S): Nikka Chemical Ind Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06107622	A	19940419	JP 1993-152920	19930531
JP 07119195	B	19951220		
JP 06107623	A	19940419	JP 1993-152921	19930531
JP 07119196	B	19951220		
US 5399772	A	19950321	US 1993-164855	19931210
EP 627415	A1	19941207	EP 1993-120018	19931211
EP 627415	B1	19970910		
R: CH, DE, FR, GB, LI				

PRIORITY APPLN. INFO.: JP 1992-179003 A1 19920612
JP 1993-152920 A 19930531
JP 1993-152921 A 19930531

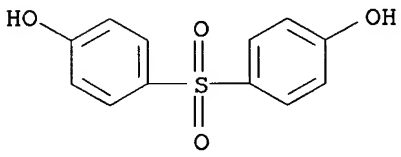
OTHER SOURCE(S): CASREACT 121:82709

AB The title sulfones, useful as coloring agents for heat-sensitive papers, are prepared with good selectivity and in good yields by heating phenols with H2SO4 in the presence of at least one of phosphonic acid, phosphinic acid, and their salts (1) in an aromatic hydrocarbon solvent (b.p. 130-200°) with azeotropic removal of H2O or (2) without solvent at 140-170° under reduced pressure. Thus, a mixture of phenol 793, H2SO4 334, and phosphinic acid 16.5 g underwent dehydration at 150-165° and 560-260 mmHg for 3 h and after obtaining 250 g raffinate 165 g phenol was added followed by dehydration at 260-100 mmHg for 2 h to give 180 g raffinate. Addnl. 165 g phenol was added and dehydration was continued at 260-100 mmHg for 2 h to give 140 g raffinate. The reaction mixture was washed with H2O to remove phenolsulfonic acid and dried to give 85% isomeric dihydroxydiphenyl sulfones consisting of 2,4'-dihydroxydiphenyl sulfone 49, 4,4'-dihydroxydiphenyl sulfone 50, and others 1 weight%.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as coloring agent for heat-sensitive papers)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:517963 CAPLUS
DOCUMENT NUMBER: 119:117963
ORIGINAL REFERENCE NO.: 119:21249a,21252a
TITLE: Synthesis and characterization of isomeric biphenyl-containing poly(aryl ether bisketones). 3. Polymers derived from 3,4'-bis(4-fluorobenzoyl)biphenyl and bisphenols
AUTHOR(S): Mani, Rajrathnam S.; Weeks, Barry R.; Mohanty, Dillip K.
CORPORATE SOURCE: Dep. Chem., Cent. Michigan Univ., Mt. Pleasant, MI, 48859, USA
SOURCE: Makromolekulare Chemie (1993), 194(7), 1935-51
CODEN: MACEAK; ISSN: 0025-116X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of high-mol.-weight amorphous and semicryst. poly(aryl ether bisketone)s were prepared from bisphenols and 3,4'-bis(4-fluorobenzoyl)biphenyl via nucleophilic aromatic substitution reactions. Model compound studies were carried out with several substituted monohydric phenols and 3,4'-bis(4-fluorobenzoyl)biphenyl or 3,4'-bis(4-chlorobenzoyl)biphenyl. The dihalo-substituted aromatic ketones were synthesized by the reaction of 3,4'-biphenyldicarboxylic acid with thionyl chloride, followed by Friedel-Crafts acylation with the appropriate aryl

halide. The required dicarboxylic acid was prepared starting from 4-bromotoluene and 3-methylcyclohexanone. Potassium carbonate-mediated reaction of the monomers in dimethylacetamide or di-Ph sulfone gave high-mol.-weight polymers in excellent yield. The glass transition temps. of the polymers are 170-190°. In addition, the polymers exhibit excellent thermal stability, as evidenced by both dynamic and isothermal thermogravimetric anal., and afford tough films by compression molding.

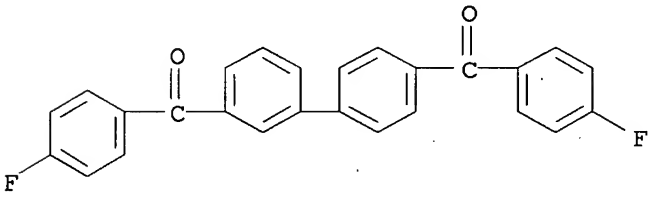
IT 149236-95-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization and thermal properties of)

RN 149236-95-3 CAPLUS

CN Methanone, [1,1'-biphenyl]-3,4'-diylbis[(4-fluorophenyl)-, polymer with 4,4'-sulfonylbis[phenol] (9CI) (CA INDEX NAME)

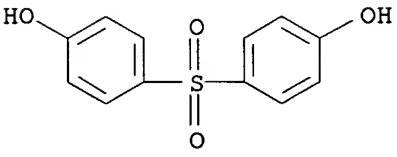
CM 1

CRN 149236-93-1
CMF C26 H16 F2 O2



CM 2

CRN 80-09-1
CMF C12 H10 O4 S

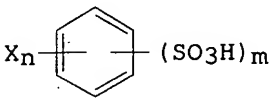


L6 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:570972 CAPLUS
DOCUMENT NUMBER: 117:170972
ORIGINAL REFERENCE NO.: 117:29541a,29544a
TITLE: Preparation of highly pure 4,4'-dihydroxydiphenyl sulfone.
INVENTOR(S): Ogata, Eiji; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04145061	A	19920519	JP 1990-265833	19901002
JP 08002863	B	19960117		

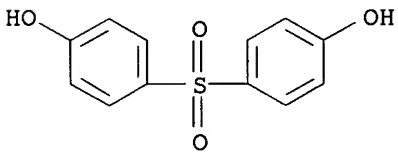
PRIORITY APPLN. INFO.: JP 1990-265833 19901002
OTHER SOURCE(S): CASREACT 117:170972; MARPAT 117:170972
GI



II

AB In the preparation of the title compound (I), phenol is reacted with a sulfonating agent in mesitylene containing an arenepolysulfonic acid [II; X = halo; n = 0, 1; m = 2, 3]. To a mixture of phenol, mesitylene, and 1,3-benzenedisulfonic acid (III) was added 98.1% H_2SO_4, the reaction mixture was then heated to 145°, at which temperature it was distilled to give a 2-phase distillate. The 2 phases were separated, the upper phase (organic) was continuously returned to the reaction mixture After four hours (the reaction reaching 165°) a 97.9:2.1 product mixture of I and 2,4'-dihydroxydiphenyl sulfone was obtained vs. a 89.3:9.0:1.7 product mixture of I, 2,4'-dihydroxydiphenyl sulfone, and trihydroxydiphenyl sulfone if III was not used. 1,3,5-Benzenetrisulfonic acid and chloro-2,4-benzenedisulfonic acid were also used.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by sulfonation of phenol)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:193899 CAPLUS
DOCUMENT NUMBER: 116:193899
ORIGINAL REFERENCE NO.: 116:32841a,32844a
TITLE: process for the preparation of 4,4'-dihydroxyphenyl sulfone (4,4'-bisphenol S) by condensation of sulfuric acid and phenol
INVENTOR(S): Mulhall, Steven E.
PATENT ASSIGNEE(S): Aristech Chemical Corp., USA
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

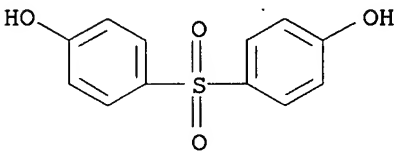
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9202493	A1	19920220	WO 1991-US4437		19910624
W: CA, JP					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE					
CA 2066178	A1	19920207	CA 1991-2066178		19910624
EP 495097	A1	19920722	EP 1991-919236		19910624
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
JP 05500522	T	19930204	JP 1991-516588		19910624
PRIORITY APPLN. INFO.:			US 1990-564493	A	19900806
			WO 1991-US4437	W	19910624

OTHER SOURCE(S): CASREACT 116:193899

AB A process for the preparation of 4,4'-dihydroxyphenyl sulfone (I), i.e., bisphenol S, comprises the treatment of H2SO4 and phenol in a 1:2 to 1:10 ratio at a temperature gradient from 40-100° to 190-205°. The water formed during the reaction is removed by distillation and then 0.1-5.0 equiv volume of solvent is added for bisphenol S and the mixture is cooled to 120° to cause precipitation of I. I is isolated by filtration and 2,4'-bisphenol S thus obtained in the filtrate is recycled and isomerized (no data). The gradual heating process effects removal of water and phenol from the product mixture and forces the dehydration reaction to go to completion. H2SO4 (22.62 g, 96.6%) was added to phenol (100.41 g) at 70° and the mixture was heated to 130° for 1 h and then heated to reflux and water and phenol were removed by distillation; then toluene was added to cause precipitation of I which was obtained >99.5% pure after recrystn.

IT 80-09-1P, 4,4'-Bisphenol S
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, process for)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:428885 CAPLUS
DOCUMENT NUMBER: 115:28885
ORIGINAL REFERENCE NO.: 115:5065a,5068a
TITLE: Process for preparing 4,4'-dihydroxydiphenyl sulfone
INVENTOR(S): Ogata, Eiji; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Industry Co., Ltd., Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

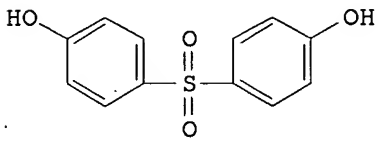
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9104245	A1	19910404	WO 1990-JP1179	19900914
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
JP 03101656	A	19910426	JP 1989-239523	19890914
JP 07091261	B	19951004		
JP 03206073	A	19910909	JP 1989-340699	19891229
JP 08002861	B	19960117		
JP 03206074	A	19910909	JP 1989-340700	19891229
JP 08002862	B	19960117		
EP 443046	A1	19910828	EP 1990-913547	19900914
EP 443046	B1	19940413		
R: DE, GB				
US 5189223	A	19930223	US 1991-678332	19910501
US 5241121	A	19930831	US 1992-904887	19920625

PRIORITY APPLN. INFO.:

JP 1989-239523	A	19890914
JP 1989-340699	A	19891229
JP 1989-340700	A	19891229
WO 1990-JP1179	W	19900914
US 1991-752589	B1	19910828

OTHER SOURCE(S): CASREACT 115:28885; MARPAT 115:28885

GI



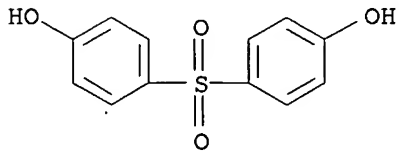
I

AB The title compound (I) was prepared by heating phenol with sulfuric acid in mesitylene and by converting 2,4'-dihydroxydiphenyl sulfone, formed in the dehydration reaction, to I by heating at isomerization temperature Thus, phenol was heated with 98% H2SO4 in mesitylene at 145° and the distillate was heated at 165° for 5 h to give 93.0% I.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, from phenol and sulfuric acid)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:7848 CAPLUS

DOCUMENT NUMBER: 110:7848

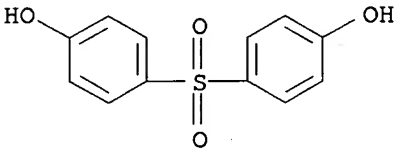
ORIGINAL REFERENCE NO.: 110:1431a,1434a
TITLE: purification of bisphenol sulfones by heating in water and/or hydroxy compounds
INVENTOR(S): Kushima, Hiroshi; Makita, Takashi; Yamamoto, Naoki
PATENT ASSIGNEE(S): Nikka Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63048261	A	19880229	JP 1986-192148	19860819
JP 07107043	B	19951115		
PRIORITY APPLN. INFO.:			JP 1986-192148	19860819

AB Bisphenol sulfones (prepared by a dehydration reaction of phenols and H2SO4), useful as monomers and developers for thermal recording papers (no data), were purified by heating at 100-200° in OH-containing organic compds. and/or H2O to obtain less colored products. Thus, 2,6-xylenol (I) was treated with H2SO4 at 140-180° for 4 h to give [3,5,4-Me2(HO)C6H2]2SO2 (II) of absorbance 0.219, which was stirred in I at 140-160° for 15 min to give II of absorbance 0.031, vs. 0.195 for heating in xylene.

IT 80-09-1P, Bis(4-hydroxyphenyl) sulfone
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and purification of, by heating in hydroxy compds. and/or water)

RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:177019 CAPLUS
DOCUMENT NUMBER: 106:177019
ORIGINAL REFERENCE NO.: 106:28753a,28756a
TITLE: Highly pure 4,4'-dihydroxydiphenyl sulfone
INVENTOR(S): Ogata, Eiji; Ono, Koji; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8606370	A1	19861106	WO 1986-JP194	19860417

W: DE, GB, US

JP 61243059	A	19861029	JP 1985-84875	19850419
JP 04060466	B	19920928		
DE 3690212	T0	19870402	DE 1986-3690212	19860417
GB 2186569	A	19870819	GB 1986-30484	19860417
GB 2186569	B	19890201		
US 4820831	A	19890411	US 1986-10095	19861212
PRIORITY APPLN. INFO.:			JP 1985-84875 A	19850419
			WO 1986-JP194 W	19860417

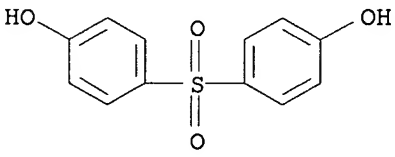
OTHER SOURCE(S): CASREACT 106:177019

AB The title compound (I) is prepared in a high yield in the presence of C6H6-m-nXm(SO3H)m (X = halogen, n = 0, 1, 2, m = 1 or 2) by a process which comprises dehydrating PhOH and a sulfonating agent or phenolsulfonic acid in a solvent, keeping at 100-200° to remove the solvent and conduct further dehydration, precipitating I, and simultaneously isomerizing 2,4'-dihydroxydiphenyl sulfone to I.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
RL: PREP (Preparation)
(manufacture of highly pure, catalysts for)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L6 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:460415 CAPLUS

DOCUMENT NUMBER: 105:60415

ORIGINAL REFERENCE NO.: 105:9871a,9874a

TITLE: Purification of 4,4'-dihydroxydiphenyl sulfone

INVENTOR(S): Morita, Yukichi; Ono, Koji; Ogata, Eiji

PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

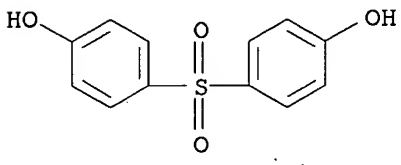
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61050958	A	19860313	JP 1984-171355	19840816
PRIORITY APPLN. INFO.:			JP 1984-171355	19840816

AB 4,4,'-Dihydroxydiphenyl sulfone (I), useful as material for polyesters, epoxy resins, polycarbonates, etc., was purified by 1:(1-15) MeOH-C6H6. Thus, 100 g crude I composed of I 93.0, 2,4'-dihydroxydiphenyl sulfone (II) 1.2, trihydroxydiphenyl sulfone (III) 4.7, and other impurities 1.1% was contacted with 200 g 1:3 MeOH-C6H6 at 50-60° for 30 min under stirring to give 70.9 g purified I composed of I 99.32, II 0.09, III 0.37, and other impurities 0.22%.

IT 80-09-1P
RL: PUR (Purification or recovery); PREP (Preparation)

(purification of)
RN 80-09-1 CAPLUS
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



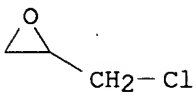
L6 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:59677 CAPLUS
DOCUMENT NUMBER: 92:59677
ORIGINAL REFERENCE NO.: 92:9893a,9896a
TITLE: Low-molecular-weight epoxide compounds
INVENTOR(S): Kosatik, Jaroslav; Muzakova, Danuse; Novak, Jiri; Spatenka, Pavel
PATENT ASSIGNEE(S): Czech.
SOURCE: Czech., 3 pp.
CODEN: CZXXA9
DOCUMENT TYPE: Patent
LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 179684	B1	19790715	CS 1975-5037	19750716
PRIORITY APPLN. INFO.:			CS 1975-5037	19750716

AB The title compds. were prepared in a 2-step process by addition of epichlorohydrin (I) to phenolic compds. and by subsequent dehydrohalogenation of the resulting chlorohydrin ethers in presence of catalysts consisting of a dispersion of alkali hydroxide in I, which has markedly higher activity as compared with powdered catalysts. Thus, a mixture of 228 parts (p-HOC6H4)2CMe2 and 555 parts I containing 1.5% H2O was heated at 60°, with continuous feeding during 3 h of 32 parts of a 50% dispersion of NaOH (particle size 1-50 μ) in I. The mixture was kept 30 min at 36° and another 144 parts of the above dispersion was added in 2 h at 60°. After 15 min, the solution was neutralized with CO2, dehydrated by using azeotropic distillation, and filtered, and I was distilled off
(for reuse) to give a resin [25068-38-6] containing <0.2% Cl and 0.53 epoxy.
IT 30601-26-4P
RL: PREP (Preparation)
(manufacture of, catalysts-solvents for, alkali-epichlorhydrin dispersions as)
RN 30601-26-4 CAPLUS
CN Phenol, 4,4'-sulfonylbis-, polymer with 2-(chloromethyl)oxirane (CA INDEX NAME)

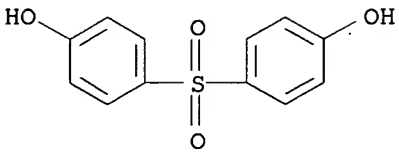
CM 1

CRN 106-89-8
CMF C3 H5 Cl O



CM 2

CRN 80-09-1
CMF C12 H10 O4 S



L6 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:462809 CAPLUS
DOCUMENT NUMBER: 85:62809
ORIGINAL REFERENCE NO.: 85:10105a,10108a
TITLE: Aromatic bis(ether phthalic anhydride) compounds
INVENTOR(S): Heath, Darrell R.; Wirth, Joseph G.
PATENT ASSIGNEE(S): General Electric Co., USA
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3956320	A	19760511	US 1974-494238	19740802
US 3787475	A	19740122	US 1971-108151	19710120
US 3972902	A	19760803	US 1972-281749	19720818
JP 58183643	A	19831026	JP 1982-67046	19820421
JP 59035912	B	19840831		

PRIORITY APPLN. INFO.: US 1971-108151 A2 19710120
US 1972-281749 A2 19720818
JP 1972-7564 19720119

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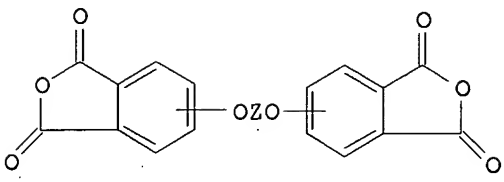
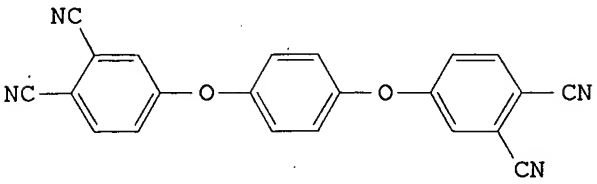
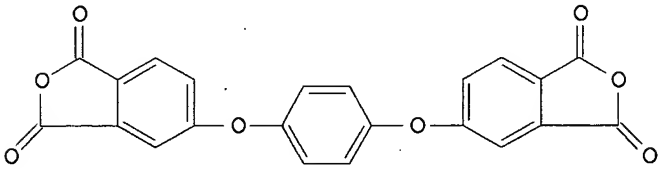


I



II



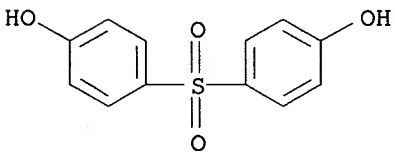
III

AB Phthalic anhydrides I (Z = phenylene, biphenylene, sulfonyldiphenylene, etc) were prepared by the reaction of a nitrophthalonitrile with a phenoxide salt to give a phthalonitrile derivative, which was hydrolyzed and dehydrated to I. Thus, 3,4-(NC)2C6H3NO2 reacted with C6H4(OH)2-p and K2CO3 in Me2SO to give 61% II, which was refluxed with KOH-MeOH to give the tetraacid, which was heated to 275° to give 99% III. I are useful as polymer intermediates.

IT 80-09-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrophthalonitriles)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



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FULL ESTIMATED COST	119.00	298.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-16.00	-16.00

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